

# DETAILS FOR SPEED FRAMES.

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JOHN HETHERINGTON & SONS, Limited,  
MANCHESTER.

SPECIAL  
COLL  
TS  
1583  
.D76  
18902



# DETAILS FOR SPEED FRAMES.

JOHN HETHERINGTON & SONS,  
LIMITED,

Makers of all kinds of  
Cotton Opening, Scutching, Carding, Preparing,  
Spinning and Doubling Machinery, also  
Engineers' Tools, Mill Gearing, Hoists, etc.

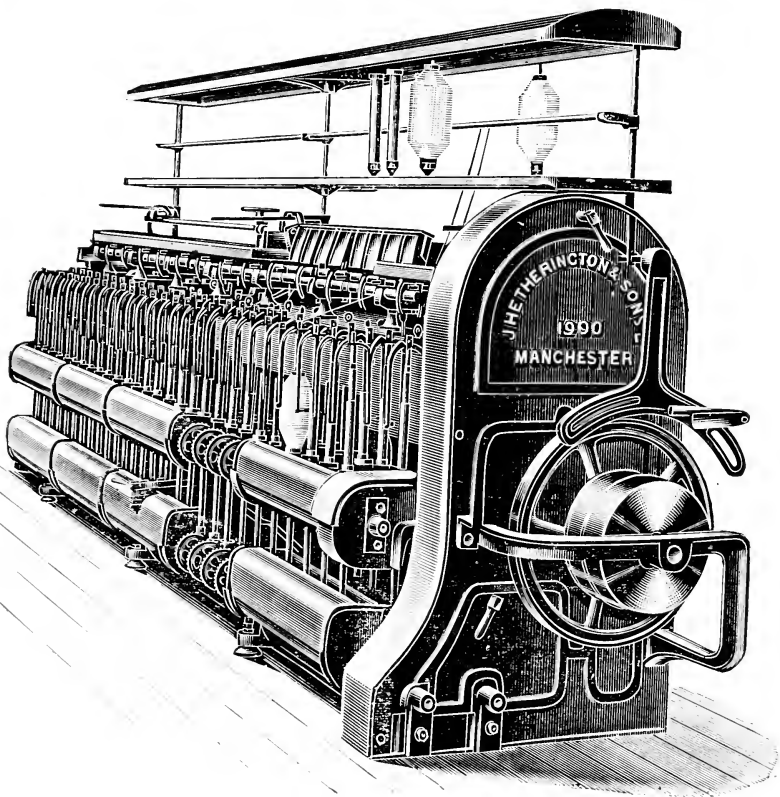
POLLARD STREET, ANCOATS,  
MANCHESTER.

Telephone No.  
6661.

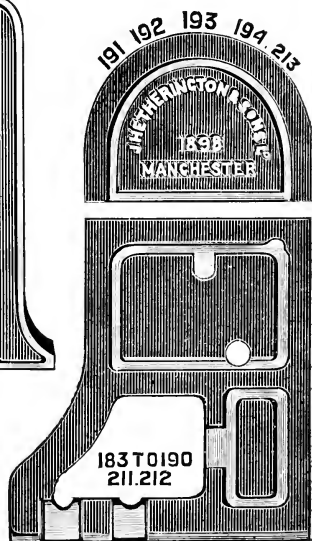
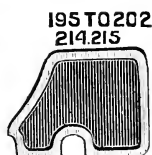
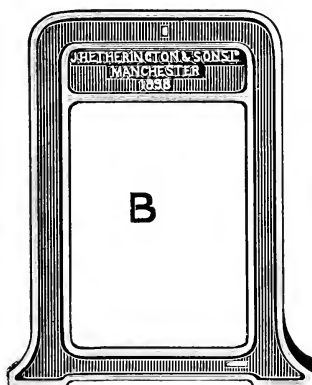
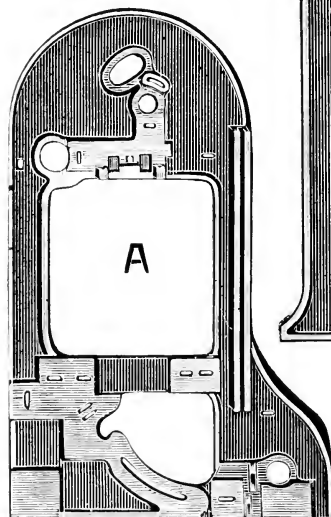
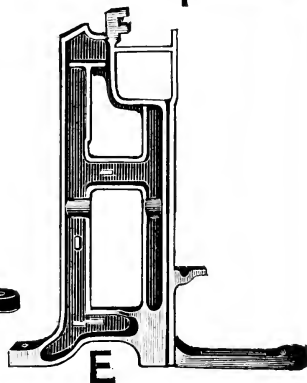
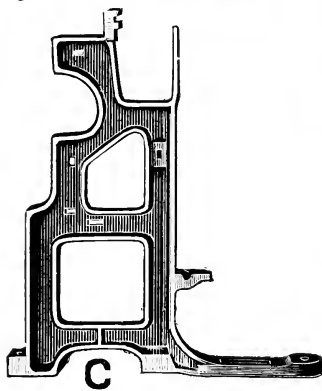
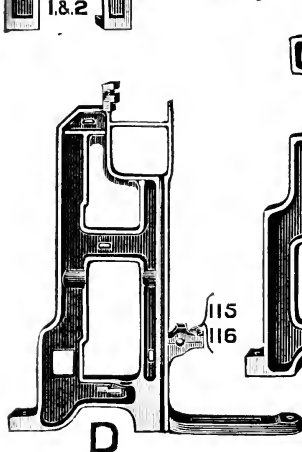
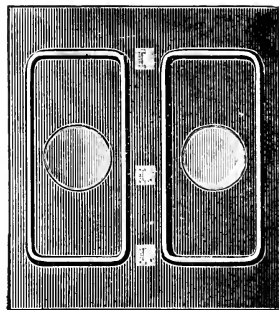
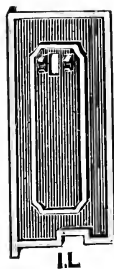
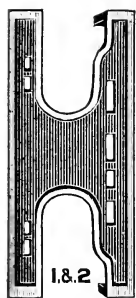
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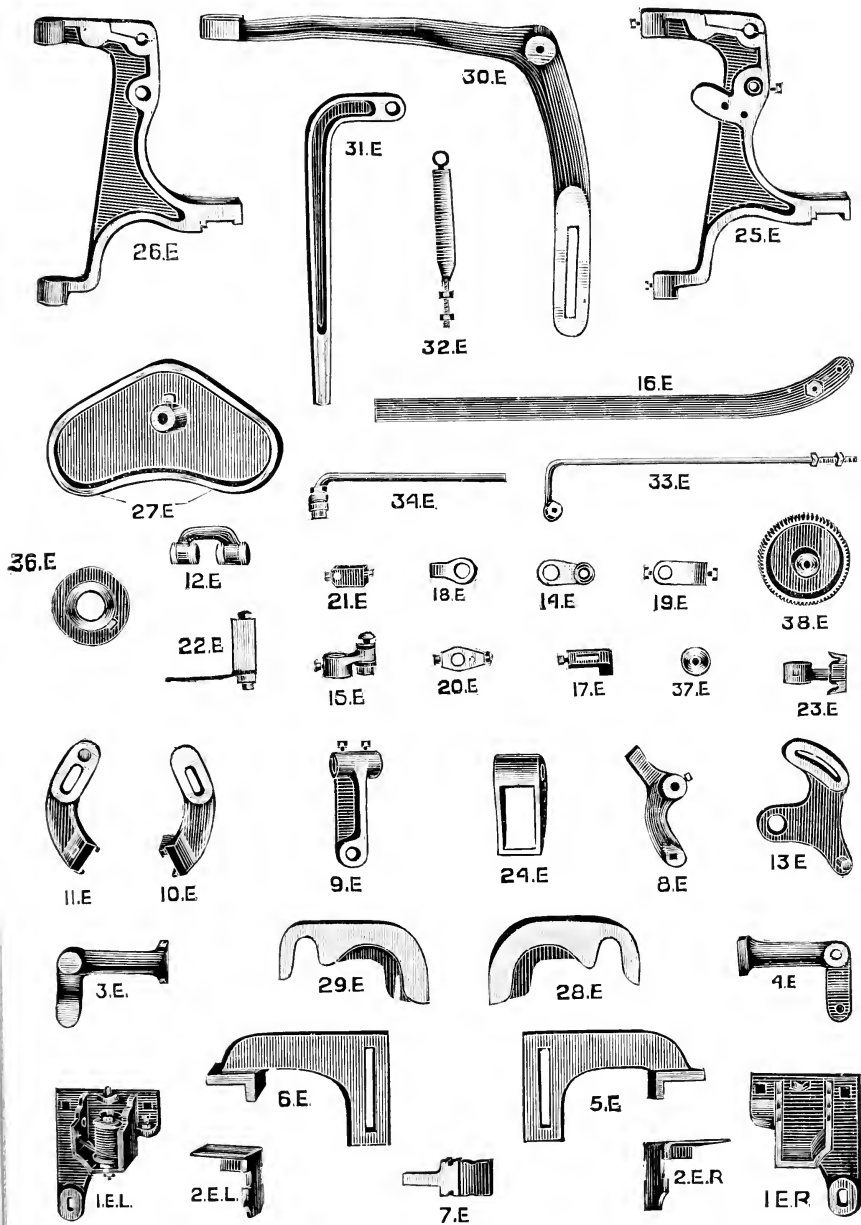


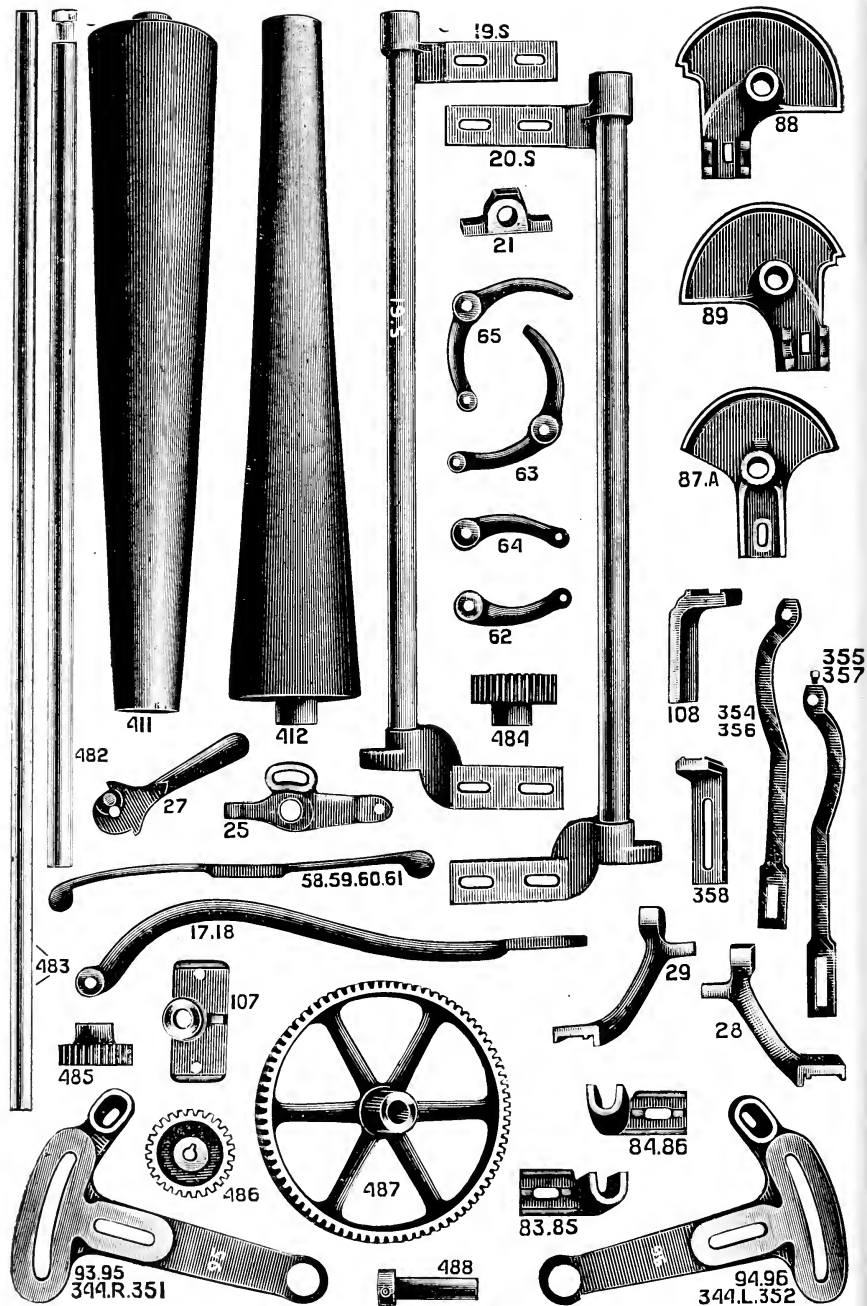
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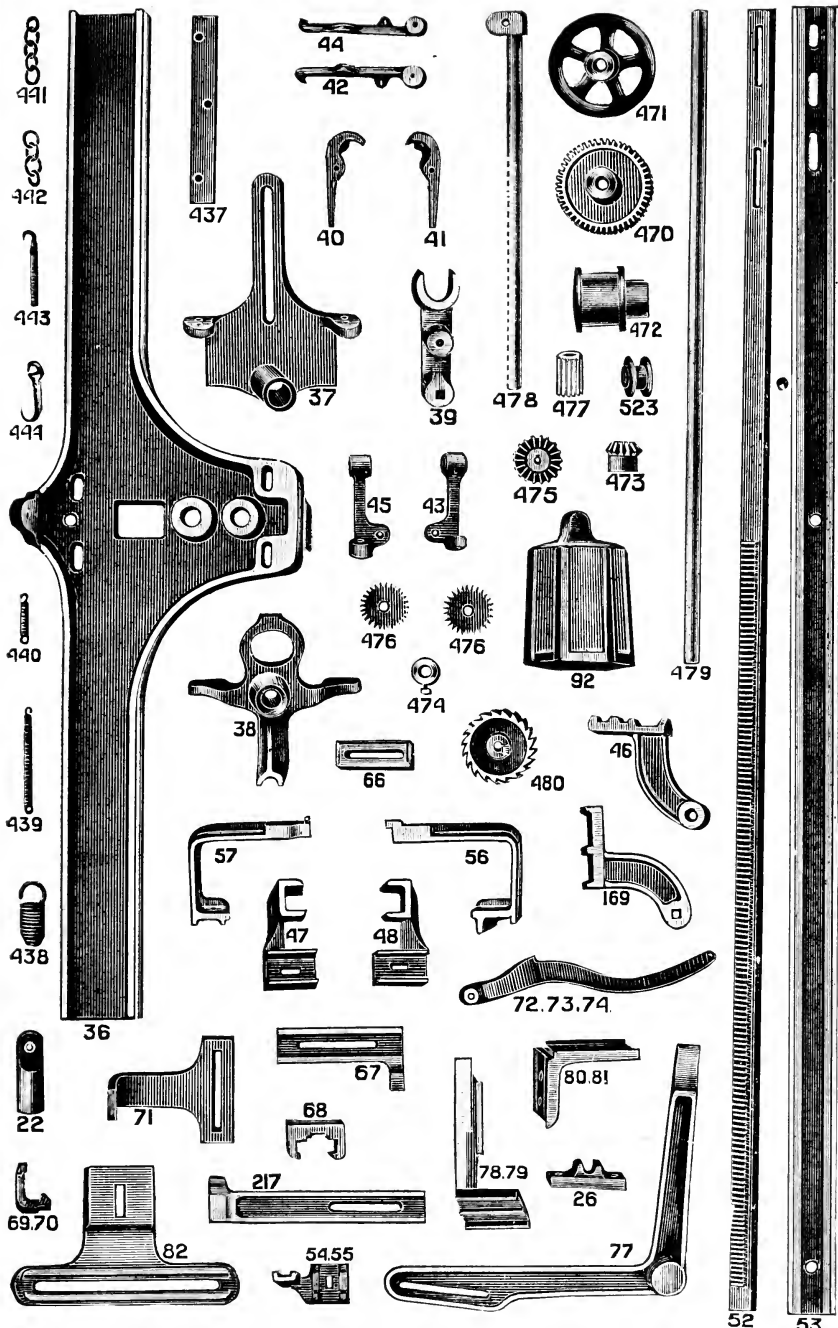
SPEED FRAME

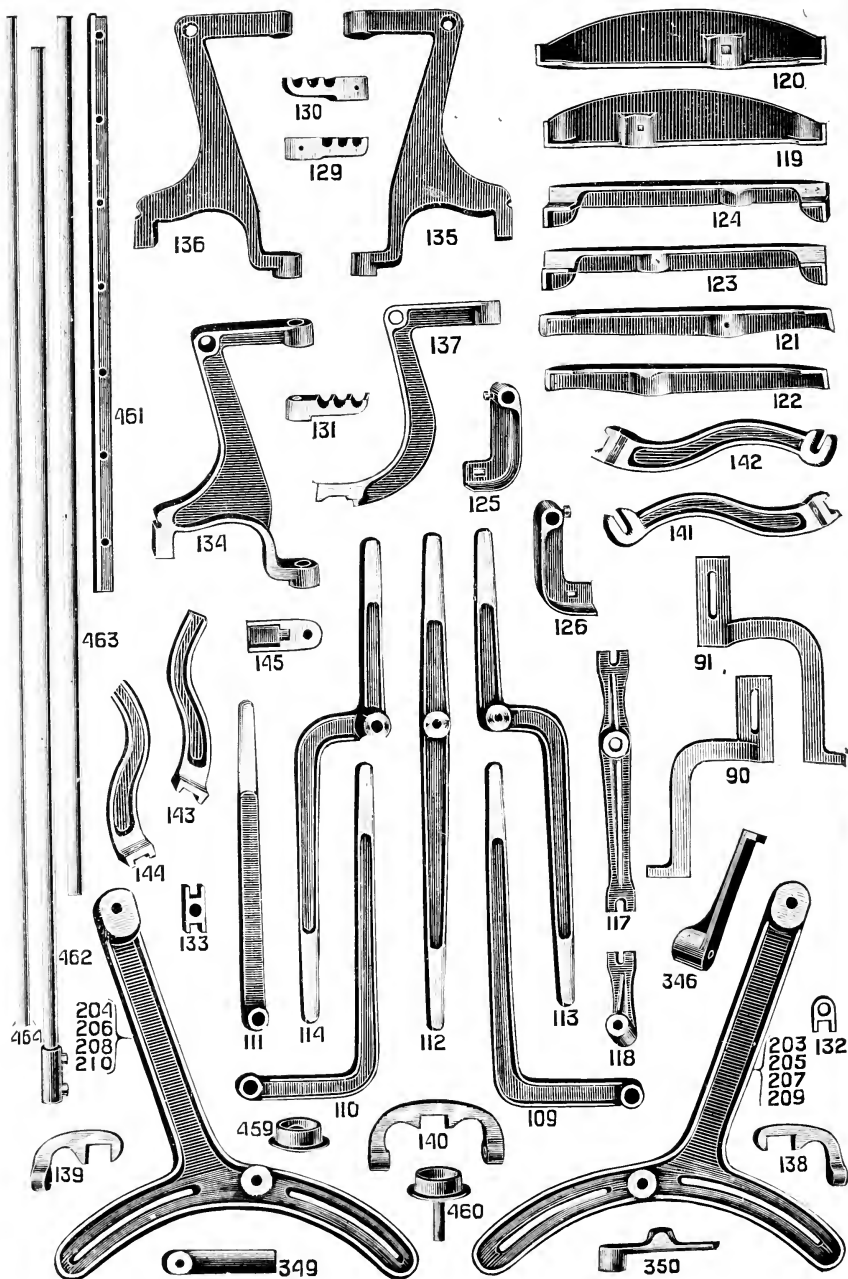














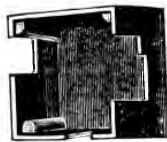
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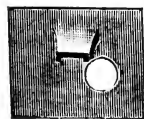
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4.L



375



372



521



377



3.L



6.L



5.L



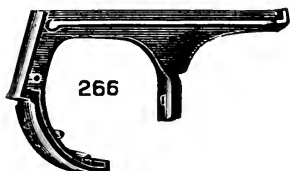
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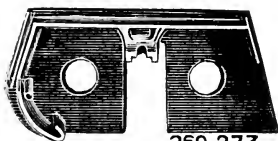
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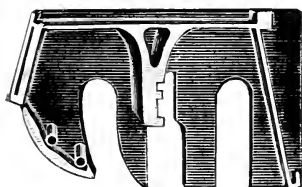
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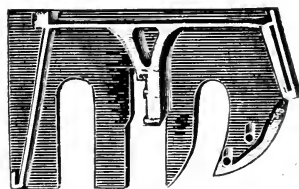
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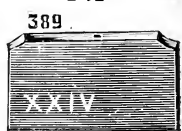
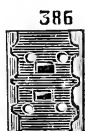
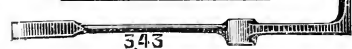
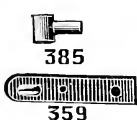
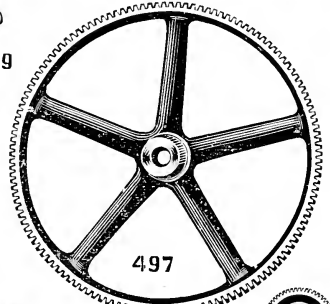
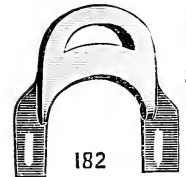
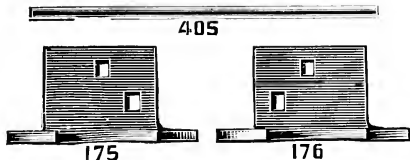
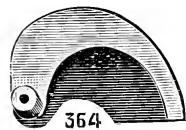
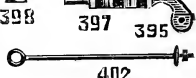
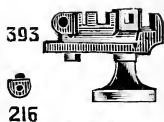
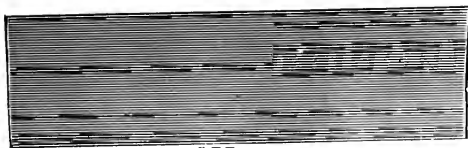
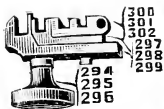
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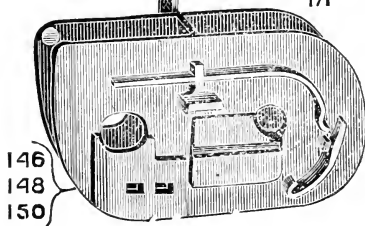
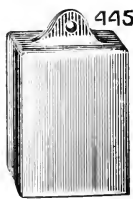
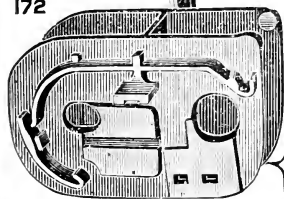
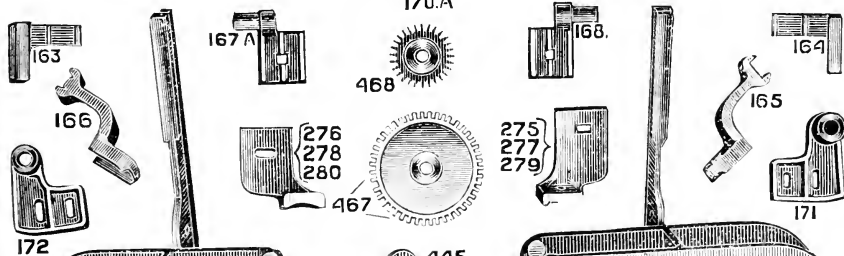
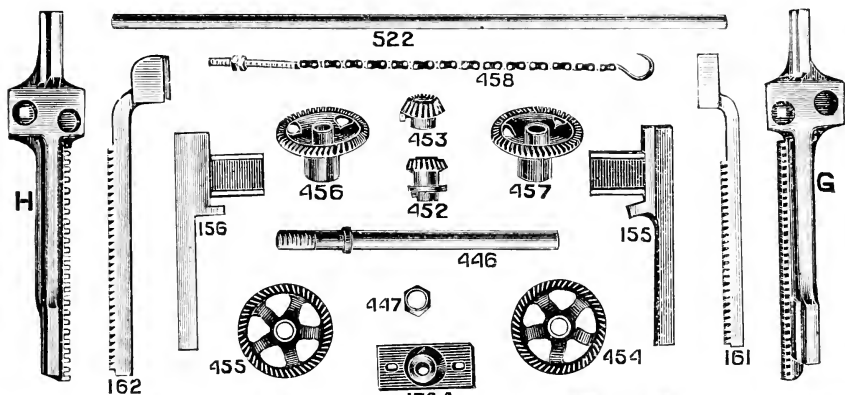
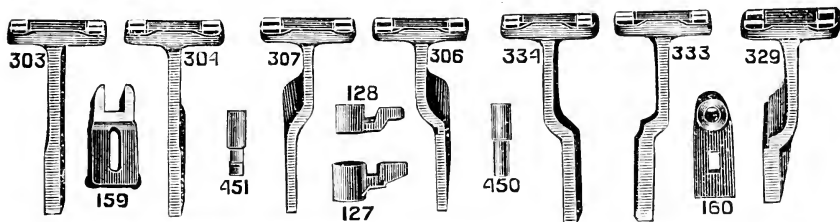
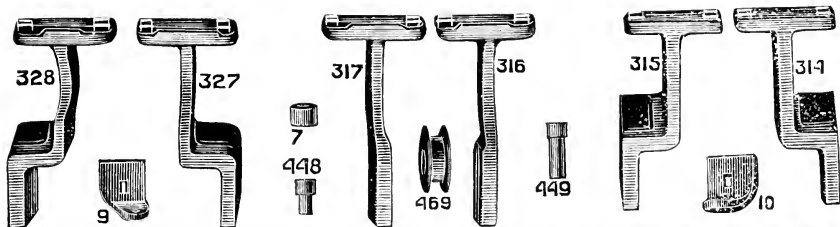


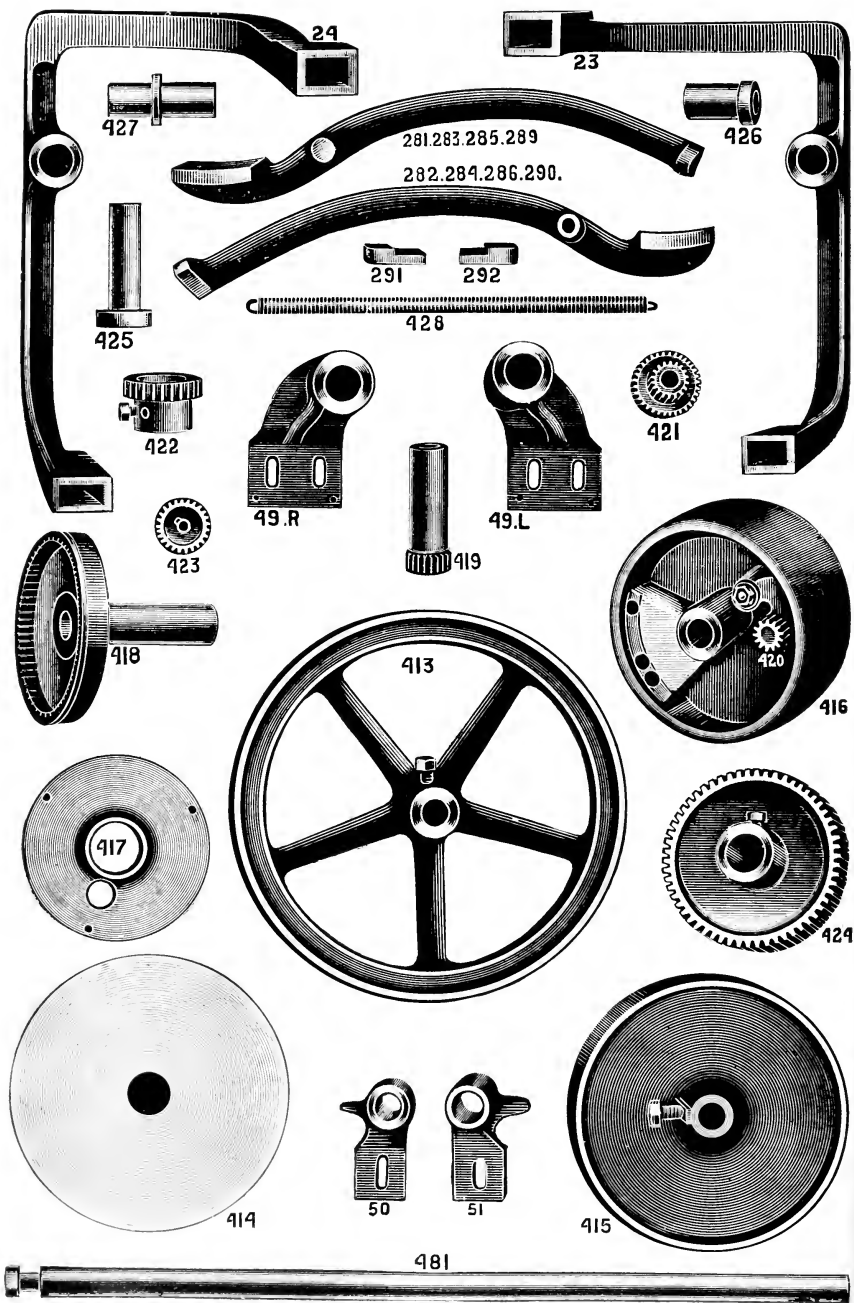
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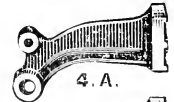
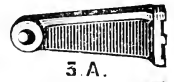
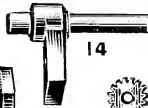
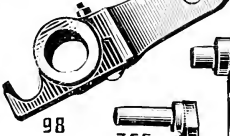
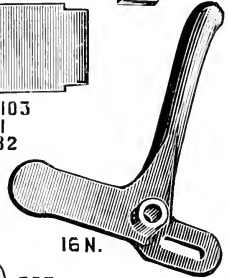
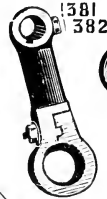
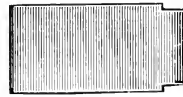
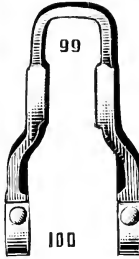
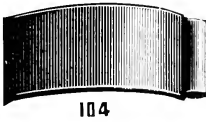
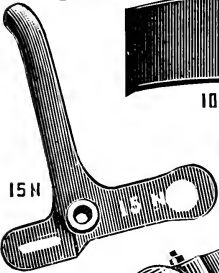
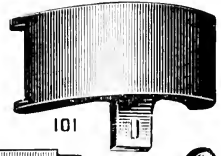
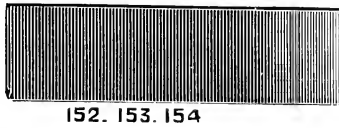
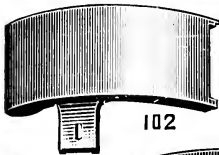


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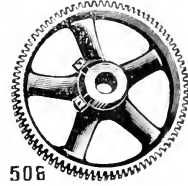
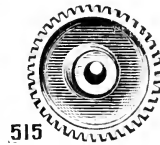
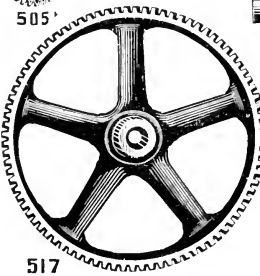
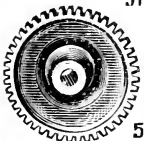
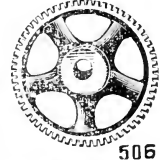
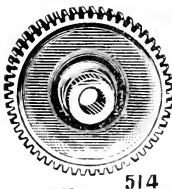
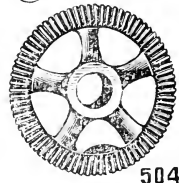
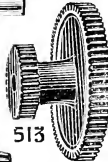
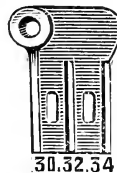
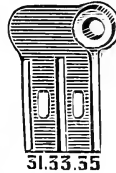


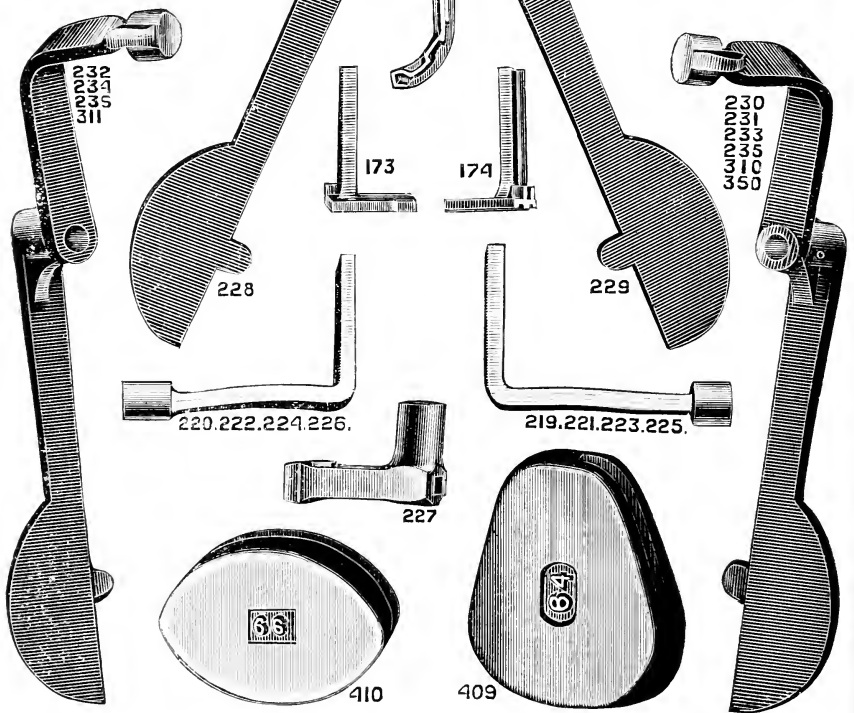
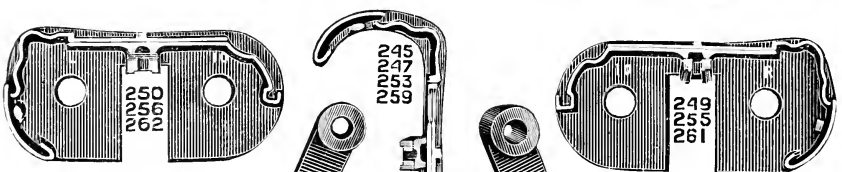
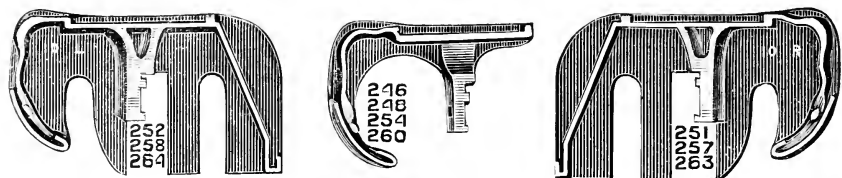
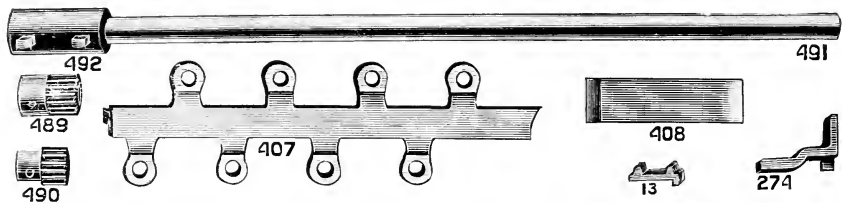




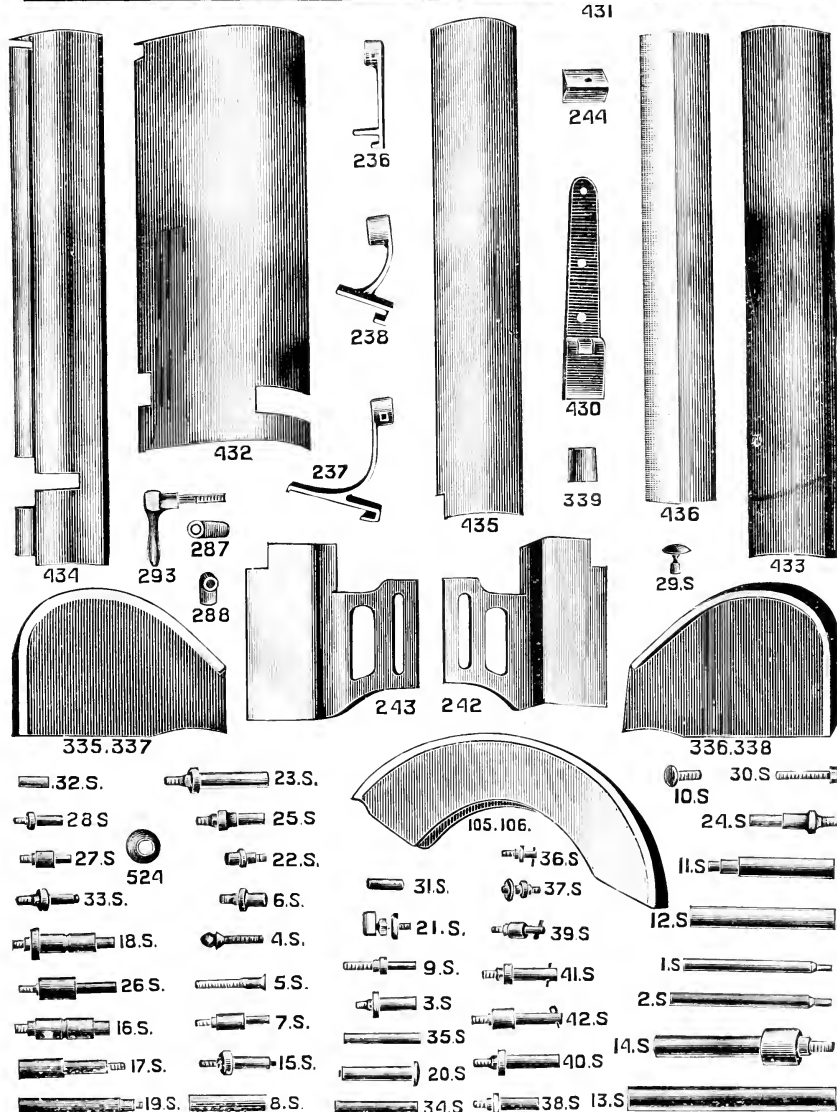
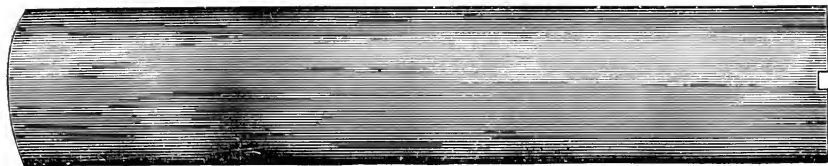


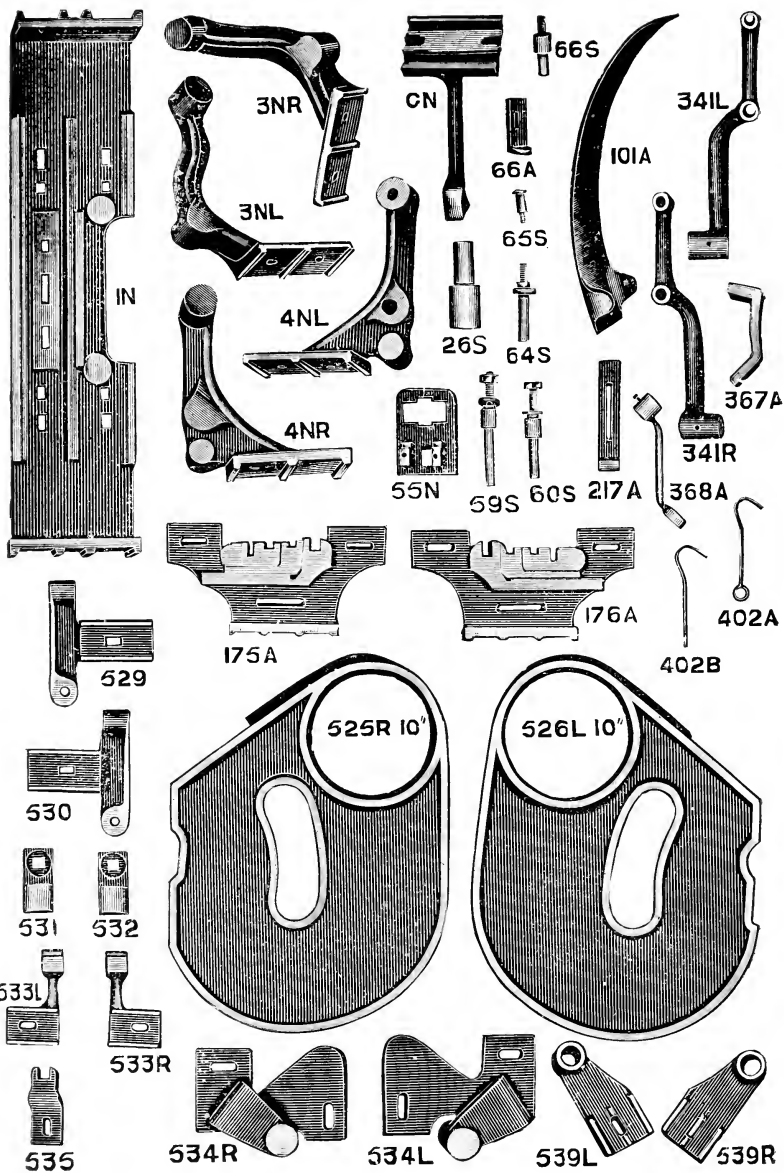
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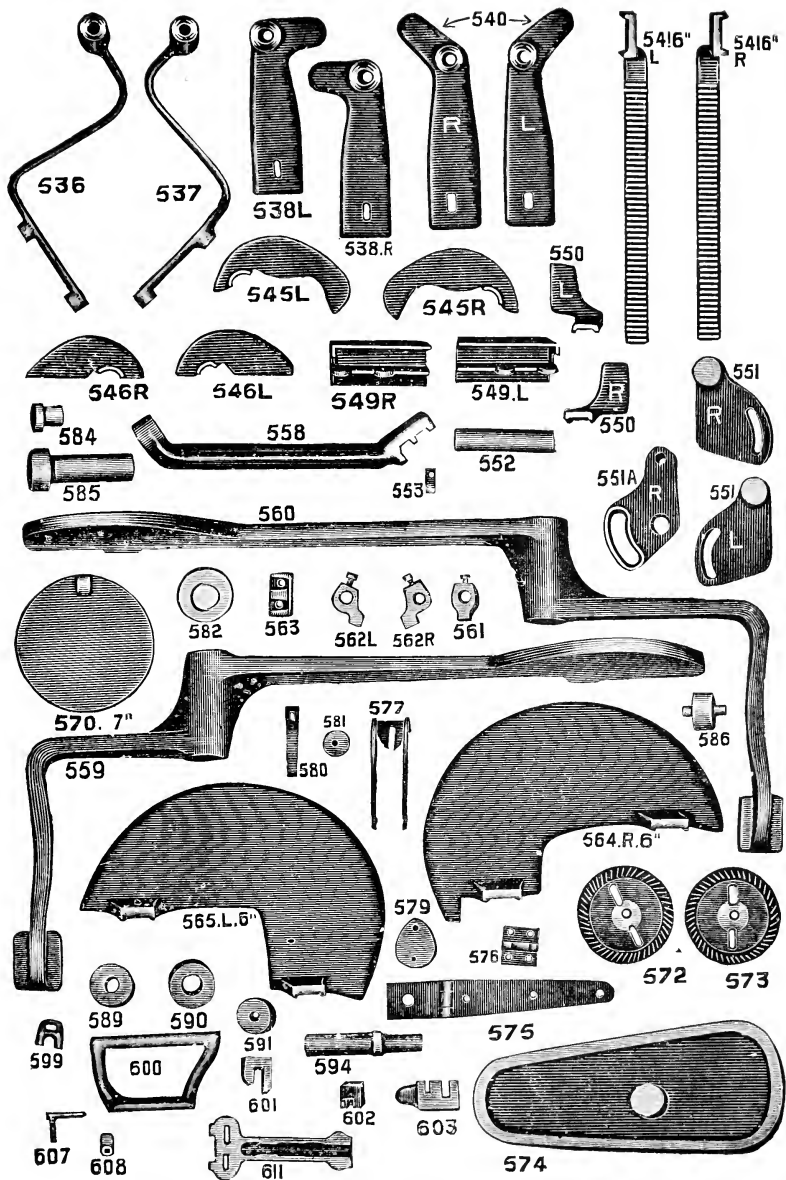


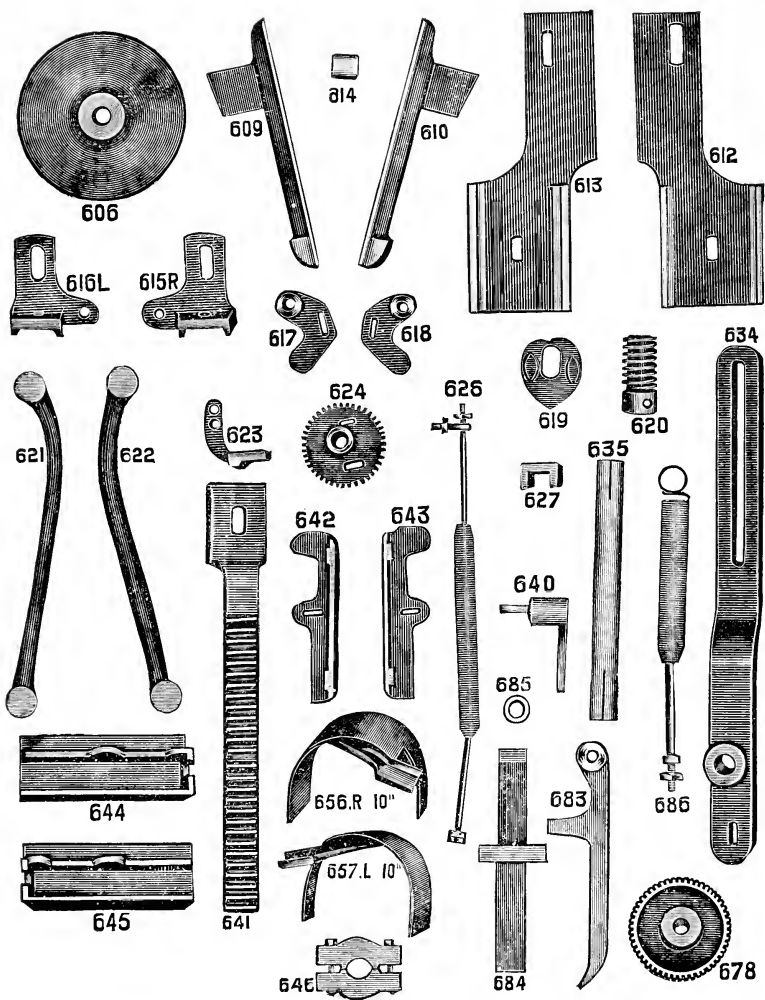












## DETAILS FOR SPEED FRAMES.

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**NOTE.—In ordering Sundries for Frames, kindly state the Hand and Lift of the Frame for which they are required.**

---

- A. Frame End
- B. Off End
- C. Gearing End Spring Piece
- D. Second Spring Piece
- E. Middle       "       "
- F. Sheet Iron Door
- G. Spring Piece Rack, R.H.
- H.       "       "       "       L.H.
- 1. Inside Fender, 7in. and 10in.
- 2.       "       "       12in.
- 3A. Top Fender Bracket
- 4A. Bottom       "       "       with Boss
- 5A.       "       "       "       without Boss
- 6A. Swan Neck Bracket, 7in. and 10in.
- 7. Socket Collar
- 8A. Swan Neck Bracket, 12in.
- 9. Chain Bracket, R.H.
- 10.       "       "       L.H.
- 11. Reversing Shaft Clutch Bracket
- 12.       "       "       Fork
- 13. Gearing End Rail Bracket
- 14. Compound Carrier Bracket
- 15N. Bottom Cannon Bracket, R.H.
- 16N.       "       "       "       L.H.
- 17. Bottom Cone Connecting Rod, 7in.
- 18.       "       "       "       "       10in.
- 19S.       "       "       Swing, R.H.
- 20S.       "       "       "       L.H.
- 21.       "       "       Pedestal

22. Reversing Rod End
23. Outside Fender, R.H.
24.     "         "         L.H.
25. Lever for Bottom Cone Swing
26. Reversing Rod Bearing
27. Bottom Cone Lifting Handle
28.     "         "         "         Bracket
29.     "         "         "         "
30. Gearing End Lifter Shaft Bracket, 6in. R.H.
31.     "         "         "         "         "         6in. L.H.
32.     "         "         "         "         "         7in. and 8in. R.H.
33.     "         "         "         "         "         7in. and 8in. L.H.
34.     "         "         "         "         "         10in. and 12in. R.H.
35.     "         "         "         "         "         10in. and 12in. L.H.
36. Motion Rail
37. Cradle Bracket
38. Cradle
39. Fork Lever
40. Cradle Catch
41.     "         "
42. Bottom Catch, R.H.
43.     "         "         R.H.
44.     "         "         L.H.
45.     "         "         L.H.
46. Upright Shaft Bracket
47. Motion Rail         "
48.     "         "         "
- 49L. Gearing End Driving Shaft Bracket, L.H.
- 49R.     "         "         "         "         "         R.H.
50. Off         "         "         "         "         R.H.
51.     "         "         "         "         "         L.H.
52. Long Rack
53. Long Rail
54.     "         "         Bracket, 7in.
55.     "         "         "         10in.
56.     "         "         Elbow Bracket, R.H.
57.     "         "         "         "         L.H.
58. Strap Guide for Cones, 6in.

59. Strap Guide for Cones, 7in.
60.   "       "       "       10in.
61.   "       "       "       12in.
62. Cone Strap Fork
63.   "       "       "
64.   "       "       "
65.   "       "       "
66. Cone Strap Stop
67.   "       "       Cross Bar
68. Long Rack Slide
69.   "       "       Bracket, 7in.
70.   "       "       "       10in.
71. T Bracket
72. Monkey Tail, 6in. and 7in.
73.   "       "       10in.
74.   "       "       12in.
75. Traverse Lever, 7in.
76.   "       "       10in.
77. Knocking-off Lever
78. Bird Cage Rail Bracket, 7in.
79.   "       "       "       "       10in.
80.   "       "       Angle Bracket
81.   "       "       "       "
82. Bird Cage
83. Outside Top Cone Bracket, R.H.
84.   "       "       "       "       L.H.
85.   "       "       "       "       Fine Jack. R.H.
86.   "       "       "       "       "       "       L.H.
- 87A. Middle Top Cone Bracket
88. Off End   "       "       "       and Guard, R.H.
89.   "       "       "       "       "       "       L.H.
90. Gearing End Angle Iron Bracket, R.H.
91.   "       "       "       "       "       L.H.
92. Hexagon Weight
93. Twist Carrier Bracket, 7in., R.H.
94.   "       "       "       7in., L.H.
95.   "       "       "       10in., R.H.
96.   "       "       "       10in., L.H.

97. Swing Arm
98. " " Cap
99. Elbow Motion
100. " " Cap
101. Spur Wheel Guard, R.H.
102. " " " L.H.
103. " " " Flap, 7in.
104. " " " " 10in.
105. Twist Carrier Guard
106. Twist Carrier Guard, Fine Jack
107. Off End Cone Swing Bracket
108. " " " Stop
109. End Setting-on Handle, Roving, R.H.
110. " " " " L.H.
111. Middle Setting-on Handle, Roving
112. " " " Slubbing
113. End Setting-on Handle, Slubbing, R.H.
114. " " " " L.H.
115. Spring Piece Cap, Roving
116. " " " Slubbing
117. Long Fish Tail
118. Short " "
119. Long End Fish Tail, R.H.
120. " " " " L.H.
121. " " " " R.H.
122. " " " " L.H.
123. " " " " Intermediate, R.H.
124. " " " " " L.H.
125. Short End Fish Tail, R.H.
126. " " " " L.H.
127. Bottom Spindle Shaft Bearer
128. Top Bobbin Shaft Bearer
129. End Top Roving Rod Bracket, R.H.
130. " " " " " L.H.
131. Middle Top Roving Rod Bracket
132. End Bottom " " "
133. Middle " " " "
134. Middle Creel Fixing, Roving



135. End Creel Fixing, Roving, R.H.  
 136. " " " " L.H.  
 137. Middle Creel Fixing, Slubbing  
 138. End Bridge, R.H.  
 139. " " " " L.H.  
 140. Middle Bridge  
 141. Sliver Roller Brackets, Slubbing, R.H.  
 142. " " " " " L.H.  
 143. " " " " " Off End, R.H.  
 144. " " " " " " " L.H.  
 145. " " " " " Small  
 146. Rail Box. 7in., R.H.  
 147. " " 7in., L.H.  
 148. " " 10in., R.H.  
 149. " " 10in., L.H.  
 150. " " 12in., R.H.  
 151. " " 12in., L.H.  
 152. " " Lid, 7in.  
 153. " " " " 10in.  
 154. " " " " 12in.  
 155. Off End Slide, R.H.  
 156. " " " " L.H.  
 157A. Carrier Stud Bracket, R.H.  
 158A. " " " " L.H.  
 159. Spindle Shaft Bracket  
 160. Door Bracket  
 161. Gearing End Rack, 7in.  
 162. " " " " 10in.  
 163. " " " " Guide, 7in., R.H.  
 164. " " " " 7in., L.H.  
 165. " " " " 10in., R.H.  
 166. " " " " 10in., L.H.  
 167A. Chain Pulley Bracket, R.H.  
 168A. " " " " L.H.  
 169. Band Carrier Pulley Bracket  
 170A. Rail Box Bracket  
 171. " " " "  
 172. " " " "

173. Rail Box Angle Bracket, R.H.
174. " " " " L.H.
175. Horse Head, R.H.
176. " " L.H.
177. Front Roller Bracket
178. " " " Slide
179. Back Roller Bracket
180. Top Cannon, R.H.
181. " " L.H.
182. Broad Carrier Guard
183. Large Panel, 6in., R.H.
184. " " 6in., L.H.
185. " " 7in., R.H.
186. Large Panel, 7in., L.H.
187. " " 10in., R.H.
188. " " 10in., L.H.
189. " " 12in., R.H.
190. " " 12in., L.H.
191. Half Circle Panel, 6in.
192. " " " 7in.
193. " " " 10in.
194. " " " 12in.
195. Bottom Door, 6in., R.H.
196. " " 6in., L.H.
197. " " 7in., R.H.
198. " " 7in., L.H.
199. " " 10in., R.H.
200. " " 10in., L.H.
201. " " 12in., R.H.
202. " " 12in., L.H.
203. Reaping Hook, 6in., R.H.
204. " " 6in., L.H.
205. " " 7in., R.H.
206. " " 7in., L.H.
207. " " 10in., R.H.
208. " " 10in., L.H.
209. " " 12in., R.H.
210. " " 12in., L.H.

211. Large Panel, Sin., R.H.  
 212. " " Sin., L.H.  
 213. Half Circle Panel Sin.  
 214. Bottom Door, Sin., R.H.  
 215. " " Sin., L.H.  
 216. Back Bar Collar  
 217. Long Grid  
 218. Balance Lever, 10in., R.H.  
 219. Foot for 1st Balance Lever, 6in., R.H.  
 220. " " " " 6in., L.H.  
 221. " " " " 7in., R.H.  
 222. " " " " 7in., L.H.  
 223. " " " " 10in., R.H.  
 224. " " " " 10in., L.H.  
 225. " " " " 12in., R.H.  
 226. " " " " 12in., L.H.  
 227. Box " " "  
 228. Arm " " " R.H.  
 229. " " " " L.H.  
 230. Middle Balance Lever, Roving, R.H.  
 231. " " " " Fine Jack, R.H.  
 232. " " " " Roving, L.H.  
 233. " " " " Intermediate and Slubbing,  
 R.H.  
 234. " " " " Intermediate and Slubbing,  
 L.H.  
 235. " " " " 11in. and 12in. R.H.  
 236. Bottom Sheet Iron Bearers  
 237. " " " " Iron Casings  
 238. Top " " " "  
 239. Middle Balance Lever, 11in. and 12in., L.H.  
 240. Balance Lever, Fine Jack, R.H.  
 241. " " " " L.H.  
 242. Rack Box, R.H.  
 243. " " L.H.  
 244. " " Slide  
 245. Top Rail Crab, 6in.  
 246. Bottom Rail Crab, 6in.

247.	Top	Rail	Crab,	7in.	
248.	Bottom	"	"	7in,	
249.	Top	"	"	Off End,	7in., R.H.
250.	"	"	"	"	7in., L.H.
251.	Bottom	"	"	"	7in., R.H.
252.	"	"	"	"	7in., L.H.
253.	Top	"	"	10in.	
254.	Bottom	"	"	10in.	
255.	Top	"	"	Off End,	10in., R.H.
256.	"	"	"	"	10in., L.H.
257.	Bottom	"	"	"	10in., R.H.
258.	"	"	"	"	10in., L.H.
259.	Top	"	"	12in.	
260.	Bottom	"	"	12in.	
261.	Top	"	"	Off End,	12in., R.H.
262.	"	"	"	"	12in., L.H.
263.	Bottom	"	"	"	12in., R.H.
264.	Bottom	Rail	Crab,	Off End,	12in., L.H.
265.	Top	"	"	Sheet Iron	Casings, 7in.
266.	Bottom	"	"	"	7in. and 10in.
267.	Top	Rail	Crab,	Sheet Iron	Casings, 10in.
268.	"	"	"	"	Off End, 7in., R.H.
269.	Top	Rail	Crab,	Sheet Iron	Casings, Off End, 7in., L.H.
270.	Bottom	Rail	Crab,	Sheet Iron	Casings, Off End, 7in. and 10in., R.H.
271.	Bottom	Rail	Crab,	Sheet Iron	Casings, Off End, 7in. and 10in., L.H.
272.	Top	Rail	Crab,	Sheet Iron	Casings, 10in., R.H.
273.	"	"	"	"	10in., L.H.
274.	Bottom	Rail	Bracket,	Middle	
275.	"	"	"	Off End,	R.H.
276.	"	"	"	"	L.H.
277.	"	"	"	"	R.H.
278.	"	"	"	"	L.H.
279.	"	"	"	"	R.H.
280.	"	"	"	"	L.H.

281.	Brake, 6in., R.H.
282.	" 6in., L.H.
283.	" 7in., R.H.
284.	" 7in., L.H.
285.	" 10in., R.H.
286.	" 10in., L.H.
287.	Bottom Door Catch
288.	Frame Plate Catch
289.	Brake, 12in., R.H.
290.	" 12in., L.H.
291.	Brake Spring Bracket, R.H.
292.	" " " L.H.
293.	Panel Handle
294.	Roller Stand, 1 $\frac{1}{2}$ in. wide
295.	" " 1 $\frac{1}{4}$ in. "
296.	" " 1 $\frac{1}{8}$ in. "
297.	" " Bottom Slide, 1 $\frac{1}{2}$ in. wide
298.	" " " " 1 $\frac{1}{4}$ in. "
299.	Roller Stand, Bottom Slide, 1 $\frac{1}{8}$ in. wide
300.	" " Top Slide, 1 $\frac{1}{2}$ in. wide
301.	" " " " 1 $\frac{1}{4}$ in. "
302.	" " " " 1 $\frac{1}{8}$ in. "
303.	Top Rail Cross Slide, Straight, 7in., R.H.
304.	" " " " " 7in., L.H.
305.	" " " " Cranked, 7in.
306.	" " " " " 7in., R.H.
307.	" " " " " 7in., L.H.
308.	" " " " " 7in., R.H.
309.	" " " " " 7in., L.H.
310.	" " " " " 7in., R.H.
311.	" " " " " 7in., L.H.
312.	" " " " Straight, 8in., R.H.
313.	" " " " " 8in., L.H.
314.	" " " " Cranked, 8in., R.H.
315.	" " " " " 8in., L.H.
316.	" " " " Straight, 10in., R.H.
317.	" " " " " 10in., L.H.
318.	" " " " " 10in., R.H.

319.	Top Rail Cross Slide, Straight, 10in, L.H.
320.	" " " " Cranked, 10in.
321.	" " " " " 10in., R.H.
322.	" " " " " 10in., L.H.
323.	" " " " " 10in., R.H.
324.	" " " " " 10in., L.H.
325.	" " " " " 10in., R.H.
326.	" " " " " 10in., L.H.
327.	" " " " " 10in., R.H.
328.	" " " " " 10in., L.H.
329.	" " " " Straight, 12in., R.H.
330.	" " " " " 12in., L.H.
331.	" " " " Cranked, 12in., R.H.
332.	" " " " " 12in., L.H.
333.	" " " " " 1in., 10in., R.H.
334.	" " " " " 1in., 10in., L.H.
335.	Extra Twist Carrier Guard, 10in., R.H.
336.	" " " " " 10in., L.H.
337.	" " " " " 7in., R.H.
338.	" " " " " 7in., L.H.
339.	Cup for Sheet Iron Casing
340A.	Beam Bracket for Back Sheet Iron
341L.	Traverse Rod Bracket, R.H.
342.	" " " " L.H.
343.	Traverse Lever for Revolving Top Clearers
344R.	Twist Carrier Bracket, 11in., R.H.
344L.	" " " " 11in., L.H.
345.	Rail Bracket for Clearer Traverse Motion
346.	New Bobbin Box Bracket
347.	Top Rail Cross Slide, New Straight, 11in., R.H.
348.	" " " " " " 11in., L.H.
349.	Strap Fork without boss
350.	" " with boss
351.	Twist Carrier Bracket, 6in., R.H.
352.	" " " " 6in., L.H.
353.	Traverse Rod Bracket
354.	Stay for Bottom Cone Bracket, 7in.
355.	" " " " 7in.

356. Stay for Bottom Cone Bracket, 10in.  
 357.     "     "     "     "     10in.  
 358. Angle Bracket for Bottom Cone Bracket  
 359. Bowl Bracket for Clearer Traverse Motion  
 360. 40T. Carrier Stud Bracket  
 361. End Division Plate Bracket, R.H.  
 362.     "     "     "     "     L.H.  
 363. Middle "     "     "     "  
 364. Draft Wheel Guard, R.H.  
 365.     "     "     "     L.H.  
 366. Hank Indicator  
 367. Bracket for Hank Indicator  
 368. Finger for Revolving Top Clearer  
 369. Notch for Steadying Pin for Revolving Top Clearer  
 370. Lock Stop Motion, Box, R.H.  
 371.     "     "     "     "     L.H.  
 372.     "     "     "     Box Lid, R.H.  
 373.     "     "     "     "     L.H.  
 374.     "     "     "     Battle Axe, 7in.  
 374L.     "     "     "     "     "     10in.  
 375.     "     "     "     Catch, R.H.  
 376.     "     "     "     "     L.H.  
 377.     "     "     "     Slide Bar Bracket, with knob  
 378.     "     "     "     "     "     without knob  
 379.     "     "     "     Notch, with knob  
 380.     "     "     "     "     without knob  
 381. Extra Swing Arm, 10in.  
 382.     "     "     "     7in.  
 383.     "     "     "     Cap  
 384. T Slide for Clearer Traverse Motion  
 385. Finger for Rod for Revolving Top Clearers  
 386. Beam Coupling  
 387. Back Roller Weight, Intermediate Frame  
 388. Front     "     "     "     "  
 389. Back     "     "     Roving and Slubbing Frames  
 390. Front     "     "     "     "  
 391. Spring for Revolving Top Clearer Traverse Motion  
 392. Stand Cap for Front Roller

- 393. Gearing End Middle Roller Slide (Brass)
- 394. Middle Finger Back
- 395. Stand " "
- 396. H Slide without nib for Finger
- 397. " with " "
- 398. Under Clearer Weight "
- 399. Top Roller Saddle
- 400. Front Weight Hook
- 401. Stirrup for Roller Weight
- 402. Weight Wire
- 403. Roller Beam
- 404. Cast Iron Top Clearer
- 405. Back Bar for Fingers
- 406. Traverse Rod
- 407. Spindle Rail
- 408. Coupling Plate for Spindle Rail
- 409. 84lb. Balance Weight
- 410. 66lb. " "
- 411. Bottom Cone
- 412. Top "
- 413. Fly Wheel
- 414. Loose Pulley
- 415. Fast "
- 416. Differential Motion Box
- 417. Box Lid
- 418. 92T. Internal Wheel
- 419. 23T. Long Boss Wheel
- 420. 14T. Steel Pinion
- 421. 35/20T. Compound Wheel
- 422. 33T. Spur Wheel
- 423. 23T. or 27T. Hollow Wheel
- 424. 58T. or 50T. Spur Wheel
- 425. Bush for Gearing End Driving Shaft Bracket
- 426. " Off " " " "
- 427. Loose Pulley Bush
- 428. Brake Spring
- 429. Spring for Lock Stop Motion
- 430. Hinge for Locking Door



- 431. Sheet Iron Cover for Cones
- 432.     "     "     "     "     "     Back of Spindle Wheels
- 433.     "     "     "     "     "     Bobbin Wheels
- 434. Bottom Sheet Iron Cover for Spindle Wheels
- 435. Front Bright Cover for Spindle and Bobbin Wheels
- 436. Bottom Sheet Iron Cover for Bobbin Wheels
- 437. Spring Bar for Shortening Motion
- 438. Bottom Spring     "     "
- 439. Cradle Catch Spring
- 440. Spring for Ratchet Wheel Catch
- 441. 5-link Chain for Shortening Motion
- 442. 4-link     "     "     "
- 443. Screw for Chain for     "     "
- 444. Hook     "     "     "     "
- 445. Gearing End Balance Weight
- 446. Long Socket for Spindle
- 447. Nut for Long Socket
- 448. Common Footstep
- 449. Long Single Hole Footstep
- 450.     "     Double     "     "
- 451. Chased     "     "     "
- 452. Bobbin Wheel
- 453. Spindle Wheel
- 454. Skew Bevel, R.H.
- 455.     "     "     L.H.
- 456. Coupling Skew Bevel, R.H.
- 457.     "     "     "     L.H.
- 458. Gearing End Balance Weight Chain
- 459. Back Sliver Roller End for Slubbing Frame (She)
- 460.     "     "     "     "     "     "     (He)
- 461. Creel Angle Iron
- 462. Stop Rod and Coupling
- 463. Creel Pillar
- 464. Roving Rod
- 465. Reversing Rod
- 466. Slide Bar for Lock Stop Motion
- 467. 46T. Rack Carrier Wheel
- 468. 28T.     "     "     "

- 469. Chain Pulley for Gearing End Balance Weight
- 470. 48T. Wheel for Long Rack
- 471. Hand Wheel for Upright Shaft
- 472. Broad Band Pulley for Upright Shaft
- 473. 16T. Boss Bevel " " "
- 474.  $\frac{3}{4}$ in. Collar " " "
- 475. 13, 16, or 18T. Shell Bevel
- 476. 26, 38, or 50T. Wheel for Shortening Motion
- 477. 18T. Poker Wheel
- 478. Poker Rack
- 479. Upright Shaft for Shortening Motion
- 480. Ratchet Wheel
- 481. Driving Shaft
- 482. Bottom Cone Shaft
- 483. Top " "
- 484. 36, 54, or 64T. Outside Top Cone Wheel
- 485. 30, 35, or 40T. Middle " " "
- 486. Twist Wheel
- 487. Twist Carrier, 80, 110, or 120T.
- 488. Twist Carrier Wheel Bush
- 489. 16T. Middle Lifter Shaft Pinion
- 490. 16T. Gearing End Lifter Shaft Pinion
- 491. Lifter Shaft
- 492. " " Coupling
- 493. Middle Roller Wheel (Steel) 18T.
- 494. Back " " "
- 495. Front " " (24T.)
- 496. " " Bush
- 497. 120, 130, or 140T. Front Roller Wheel
- 498. 90T. Crown Wheel
- 499. 70T. Broad Carrier Wheel
- 500. Draft Wheel
- 501. Back Roller Wheel
- 502. 16, 20, or 24T. Strike Bevel
- 503. 58T. Upright Bevel
- 504. 77T. Reversing Bevel
- 505. Lifter Change Wheel
- 506. 64T. Lifter Cannon Wheel

- 507. 16T. Lifter Cannon Wheel
- 508. 80T. " Shaft "
- 509. 20T. Lineshaft Bevel
- 510. 45, 55, or 65T. Lineshaft Wheel
- 511. 40T. Carrier Wheel
- 512. 40 40, 45 30, 50/25T. Compound Carrier Wheel
- 513. 65 30, 65/40, 65 50T. Bottom Cone Compound Wheel
- 514. 46 or 54T. Driving Shaft Wheel
- 515. 43T. Elbow Motion Wheel
- 516. Spindle or Bobbin Shaft Wheel
- 517. 80 or 86T. Large Carrier Wheel
- 518. Reversing Bush
- 519. Lineshaft
- 520. Reversing Shaft
- 521. Knocking-off Fork for Lock Stop Motion
- 522. Spindle or Bobbin Wheel Shaft
- 523. Small Band Pulley
- 524. Stop Collar for Bobbin Shaft
- 1L. Locking Door Plate, R.H.
- 2L. " " " L.H.
- 3L. " " Catch
- 4L. " " Lever
- 5L. " " Finger
- 6L. " " Beam Bracket

## ELECTRIC STOP MOTION.

- 1E. Box, R. and L.H.
- 2E. Box Lid, R. and L.H.
- 3E. Lever for Eccentric, R.H.
- 4E. " " " L.H.
- 5E. L Bracket, R.H.
- 6E. " " L.H.
- 7E. Frog
- 8E. Rocking Finger
- 9E. Stop Rod Bracket

- 10E. Bracket to carry Eccentric, R.H.
- 11E.     "           "           "       L.H.
- 12E. C Bracket
- 13E. Carrier Wheel Bracket
- 14E. Off End Vibrator Shaft Bracket
- 15E. Gearing End Vibrator Shaft Bracket
- 16E. Connecting Rod
- 17E.     "           "       Notch
- 18E. Extra Roving Rod Bracket
- 19E. Connection Bracket for Vibrator Shaft
- 20E.     "           "           "       Creel Pillar
- 21E. Coupling Bracket for Conductor Rod
- 22E. Bracket for Cut-off Spring
- 23E. Vibrator
- 24E. Bridge
- 25E. Off End Creel Fixing
- 26E. Middle           "           "
- 27E. Off End Carrier Wheel Guard
- 28E. Eccentric Carrier Guard, R.H.
- 29E.     "           "           "       L.H.
- 30E. Knock-off Lever, R. and L.H.
- 31E. Setting-on Handle, R. and L.H.
- 32E. Spring for Connecting Rod
- 33E. Conductor Rod
- 34E.     "           "
- 35E.     "           "
- 36E. Eccentric
- 37E. Eccentric Bowl
- 38E. 70T. Carrier Wheel

## STUDS.

- 1S. Stud for Ratchet Wheel, Shortening Motion
- 2S.     "     "     Shell Bevel           "           "
- 3S.     "     "     Reversing Fork       "           "
- 4S. Regulating Screw for Ratchet Wheel, Shortening Motion
- 5S.  $\frac{1}{2}$ in. Spring Screw, Shortening Motion

- 6S. Stud for Reversing Rod End, Shortening Motion
- 7S. " " Ratchet Wheel Catches " "
- 8S.  $4\frac{1}{2}$ in.  $\times$   $\frac{5}{8}$ in. Pin for Reversing Fork " "
- 9S. Stud for Cradle Catches " "
- 10S. Cradle Stud for Traverse Motion Lever
- 11S. Stud for Lifter Cannon
- 12S. Balance Lever Pin
- 13S. Long " "
- 14S. Stud for 40 40T. Compound Carrier Wheel
- 15S. " " Rack Carrier Wheel
- 16S. Shell Wheel Stud for Differential Motion (Intermediate and Slubbing)
- 17S. Stud for 35 20T. Compound Wheel, Differential Motion
- 18S. Shell Wheel Stud for Differential Motion (Roving)
- 19S. Stud for Draft Wheel Cannon
- 20S. " " 70T. Broad Carrier Wheel
- 21S. Oil Screw for Differential Motion
- 22S. Stud for Drop Lever, Lock Stop Motion
- 23S. " " Small Band Pulley (Ordinary)
- 24S. " " " " " (Lock Stop Motion)
- 25S. " " Lock Stop Motion Catches
- 26S. " " Knocking-off Lever
- 27S. " " Monkey Tail
- 28S. " " Traverse Rod Bracket
- 29S. Guard Knob
- 30S. Bird Cage Stud
- 31S. Pin for Slubbing Frame Handle
- 32S. " " Cone Lifting Lever
- 33S. Stud for Draft Wheel Guard
- 34S.  $\frac{5}{8}$ in. Pin for Cone Strap Fork
- 35S.  $\frac{3}{8}$ in. " " " " "
- 36S. Stud for Connecting Rod, Electric Stop Motion
- 37S. " " Cam Bowl " " "
- 38S. " " Magnet " " "
- 39S. " " Monkey Tail " " "
- 40S. " " Cam " " "
- 41S. " " Oscillating Finger " " ,

428. Stud for Knocking-off Lever Electric Stop Motion  
 1X. New Inside Fender  
 3NR. Gearing End Fender Bracket, R.H.  
 3NL. " " " " L.H.  
 4NR. Off End " " R.H.  
 4NL. " " " " L.H.  
 6X. Middle " "  
 268. Knocking Off Lever Bush  
 55X. Bracket for Long Rack  
 598. Long Stud for 50s Carrier Off End Slubber  
 608. Short " " " "  
 648.  $\frac{5}{8}$ in. Stud for Heywood's Traverse Motion  
 658. Button Head Stud for Heywood's Traverse Motion  
 66A. Small Stop for Long Rack  
 668. Stud for Clearer Traverse Motion Bowl  
 101A. Spur Wheel Guard  
 175A. R.H. Gearing End Stand  
 176A. L.H. " " "  
 217A. Long Grid for Long Rack  
 341R. Roving Rod Bracket for Revolving Clearer  
 341L. " " " " " "  
 367A. Indicator Bracket  
 368A. Guide for Revolving Clearer  
 402A. Straight Weight Wire  
 402B. Crossed " "  
 525R. 10in. New Twist Carrier Guard  
 526L. 10in. " " " "  
 529. Gearing End Top Creel Fixing, R.H.  
 530. " " " " " L.H.  
 531. " " Bottom " " R.H.  
 532. " " " " " L.H.  
 533R. Bracket for Carrying New Spur Wheel Guard  
 533L. " " " " " "  
 534R. Compound Carrier Brackets  
 534L. " " " "  
 535. Middle Roller Bracket  
 536. Gearing End Traverse Rod Bracket for Revolving  
 Top Clearer, R.H.

537. Gearing End Traverse Rod Bracket for Revolving  
Top Clearer, L.H.
- 538L. 6in. Off End Lifter Shaft Bracket
- 538R. 6in. " " " "
- 539L. 7in. " " " "
- 539R. 7in. " " " "
- 540RL. 10in. " " " "
- 541R. 6in. " " " Rack
- 541L. 6in. " " " "
- 545R. 7in. Guard for Lifter Rack
- 545L. 7in. " " " "
- 546L. 10in. " " " "
- 546R. 10in. " " " "
- 549L. Clearer Ends
- 549R. " "
- 550L. Guide for Off End Rack
- 550R. " " " "
- 551R. Swivel Bracket for 50s Wheel
- 551L. " " " "
- 551AR. " " " "
552. Motion Bush
553. Cap for Rack Bowl Bracket
558. Extra Creel Fixing
- 559RH. 8in. Balance Lever
- 560LH. 8in. " "
561. Notch for 7in. Brake
- 562R. " 10in. "
- 562L. " 10in. "
563. Angle Iron Coupling
- 564R. 6in. Plate for Twist Carrier Guard
- 565L. " " " "
570. 7in. Round Cover for Twist Carrier Guard
- 572R. Split Skew Bevels
- 573L. " " " "
574. Off End Slubbing Guard
575. Locking Door Hinge (large)
576. " " " (small)
577. 1½in. Underclearer Spring

- 579. Oval Plate for Large Panel
- 580. Electric Stop Motion Spring
- 581. Weight Wire Washers
- 582. Floor Washers
- 584. Traverse Lever Bush
- 585. Twist Carrier Bush
- 586. Rack Bowl
- 589. 1in. Collar, 2in.  $\times$   $1\frac{1}{4}$ in. wide
- 590.  $1\frac{1}{2}$ in. " "
- 591.  $\frac{7}{8}$ in. "  $1\frac{3}{4}$ in.  $\times$   $1\frac{1}{8}$ in. wide
- 594. Short Sockets
- 599. Slubbing Traverse Guide
- 600. New Flat Bottom Stand
- 601. Front Stand Slide,  $1\frac{1}{2}$ in. wide
- 602. Middle " " " "
- 603. Back " " " "
- 606. Cone End
- 607. Small Handle for Twist Carrier Plate.
- 608. " Catch " " " "
- 609RH. Blade for Heywood's Shortening Motion
- 610LH. " " " "
- 611. Centre Part for Heywood's Shortening Motion
- 612RH. Bracket for Reversing Bowls
- 613LH. " " " "
- 614. Reversing Bowls
- 615R. Traverse Motion Bracket
- 616L. " " "
- 617R. " " Lever for Heart
- 618L. " " " " "
- 619. " " Heart
- 620. " " Worm
- 621R. " " Connecting Rod
- 622L. " " " "
- 623. Bracket for Traverse Rod
- 624. 36T. Worm Wheel
- 625. Traverse Motion Spring
- 626. " " Thumb Screw
- 627. Brass Step for Spindle Shaft Bracket



- 634. 6in. Traverse Lever
- 635. Tube for Coupling Bevel
- 640. Handle for Bottom Door
- 641. 6in. Box Rack
- 642RH. Clearer End for  $6\frac{1}{4}$ in. Top Clearer Middle
- 643LH. " " "  $6\frac{1}{4}$ in. " " "
- 644RH. Outside Clearer End for  $6\frac{1}{4}$ in. "Clearer"
- 645LH. " " " "  $6\frac{1}{4}$ in. "
- 646 New Pattern Coupling Clip
- 656R. 10in. Rack Wheel Guard
- 657L. 10in. " " "
- 683 Finger for Ratchet Wheel of Bottom Cone
- 684 Gearing End Division Plate Ratchet (Broad Foot)
- 678 50<sup>s</sup>T. Boss Carrier Wheel, 14<sup>s</sup> Pitch
- 685 Bowl for Clearer Traverse Motion
- 686 Spring " " "

DATE DUE

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Details for speed frames

